incision sites in 1 or both testes in the search for these pockets of sperm.[3] TESA also requires multiple aspirations in these azoospermic patients, although the success rate with TESA may not be as high as with TESE.[4,5] In addition, there is never any guarantee that any of these pockets of sperm will be found when either of these 2 procedures is performed.

Azoospermia: Is Simple Centrifugation Indicated? A National Survey of Practice and the Oxford Experience

Swanton A, Itani A, McVeigh E, Child T.

Fertil Steril. 2007;88:374-378.

Because of the time, cost, and invasiveness associated with either a micro-TESE or multiple TESE procedures, it is incumbent upon the urologist and reproductive endocrinologist to be 100% sure that there are definitely no sperm in the ejaculate. Because a semen analysis is usually performed using only a small sample of the specimen, it is possible that if only a few sperm are present in an entire ejaculate, they may be missed using the standard laboratory-performed semen analysis. One option that has been suggested is to centrifuge the ejaculated specimen to determine whether any sperm can be identified in this way. By performing this simple step in the laboratory, Swanton and colleagues found that 22% of 87 men who were azoospermic according to conventional semen analysis had sperm in their centrifuged specimen and therefore did not require TESE for sperm harvesting. This study adds to the evidence that all azoospermic men should have their samples centrifuged,[6] because the observation of even 1 or 2 sperm in the ejaculate suggests that spermatogenesis is occurring somewhere within the gonads. This simple observation has significant prognostic and therapeutic implications in men with azoospermia who are considering intracytoplasmic sperm injection with in vitro fertilization. ■

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Timing of Sperm Harvesting: Is There Room for Improvement?

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[*Rev Urol.* 2008;10(2):170-171]

For urologists who treat infertility as part of their practice, it is not unusual to be "on call" to harvest sperm from the male partner of a couple undergoing in vitro fertilization (IVF). The timing of sperm harvesting is directly related to the day that egg retrieval of the female partner is going to occur. Some embryologists (who manipulate the sperm in the IVF laboratory and perform intracytoplasmic sperm injection [ICSI]) strongly believe that the sperm should be retrieved from the male partner on the same day that egg retrieval occurs. Conversely, other embryologists have no objection to performing sperm harvesting the day before egg retrieval, particularly if the sperm harvesting procedure is to be testicular sperm extraction (TESE). With TESE the sperm that are extracted from the tubules of the testicular tissue may take a while to obtain motility, which is the main in vitro criterion for choosing which sperm are to be used for the IVF plus ICSI process. By performing TESE the day before egg retrieval, the laboratory personnel allow themselves enough time to dissect the testicular tissue and retrieve the sperm, particularly in the case of nonobstructive azoospermic patients, for whom spermatogenesis may be severely impacted and in whom it may take a long time, relatively speaking, to find sperm in the tissue. However, some embryologists insist that sperm retrieved the day before egg retrieval do not "survive" as well as sperm retrieved the day of egg retrieval.

This inconsistency and variability between IVF laboratories and their embryologists is most likely due to the individual experience of each laboratory rather than any solid, evidence-based data. If it could be demonstrated that harvesting sperm earlier than the day of egg retrieval does not severely impact the ability of the sperm to undergo fertilization, this could make life easier for all concerned because on many occasions the actual day of egg retrieval does not fall on the date originally targeted. In fact, in some cases, the day of egg retrieval may be a week or so later than anticipated at the beginning of the stimulation cycle of the female

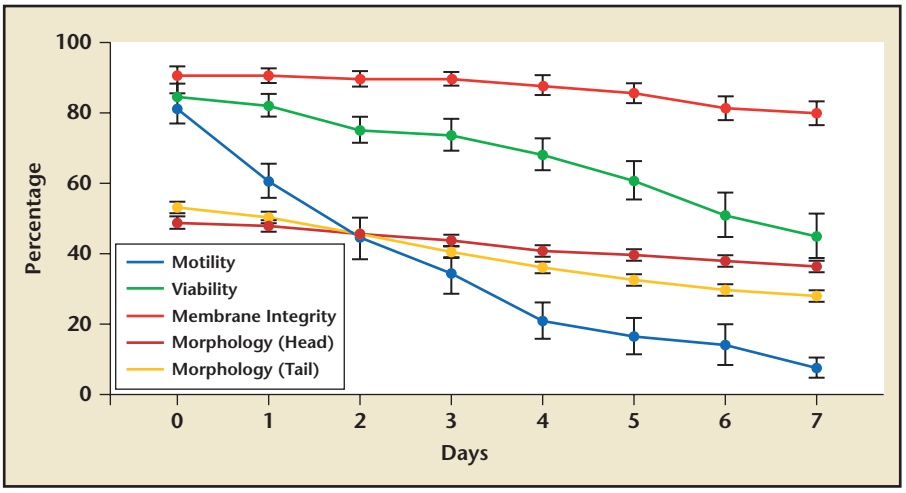

Figure 1. *Motility, viability, morphology, and membrane integrity patterns exhibited by spermatozoa in culture for 7 days. Values represent the mean ± standard error of 11 samples for each parameter at each time point. Reproduced with permission from Hossain AM et al,* Fertil Steril. *2008;89:237-238.*

partner. For urologists harvesting sperm in such a situation, this can play havoc with their daily routine and schedule.

Extended Culture of Human Spermatozoa in the Laboratory May Have Practical Value in the Assisted Reproductive Procedures

Hossain AM, Osuamkpe CO, Nagamani M.

Fertil Steril. 2008;89:237-238.

In an attempt to determine whether sperm function is impacted by keeping them in culture for an extended period after retrieval, Hossain and colleagues took 11 semen samples from supposedly normal men and kept them in culture for 7 days. They observed that the only function that significantly decreased after 24 hours was sperm motility, but even this parameter only demonstrated a decrease of approximately 20% (Figure 1). Sperm viability did not significantly decrease, which suggests that the majority of sperm that eventually became nonmotile at 24 hours in culture were still viable.

Therefore, this pilot study suggests that sperm harvested from normal patients can be successfully retrieved and stored in culture for at least 24 to 48 hours or possibly longer before egg retrieval without significantly compromising their viability. Although the overall motility of the sperm did decrease after 24 hours, this was by only 20%, with the majority of the sperm still motile by that time. What obviously needs to be confirmed now is whether sperm from oligospermic patients behave in a similar manner. Such an observation in oligospermic men would definitely make life easier for those of us who have to rearrange our schedules on an almost daily basis when an egg retrieval is imminent. ■

Prostate Cancer

Weighing the Risks: Prostate Cancer Versus Cardiovascular Disease

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[*Rev Urol.* 2008;10(2):171-173]

The treatment of prostate cancer can be a very case-specific decision. Although it is clear that surgery provides a cure for some patients, there can be negative side effects that would make it the wrong therapeutic option for others. Some patients who are older and have low-volume prostate cancer may be excellent candidates for the expectant management of prostate cancer, whereas this would certainly be the wrong choice for a